

QUARTERLY SUMMARY REPORT ON WELL-FORMED HAZARDOUS WASTE CLEANUP DATA

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CONTENTS

1.0	INTRODUCTION	1
1.1	Background	1
1.2	Purpose	1
1.3	Scope	2
2.0	METHODOLOGY	2
3.0	SOURCES OF STATE HAZARDOUS WASTE CLEANUP DATA SETS	3
4.0	SUGGESTED DATA ELEMENTS FOR STATE HAZARDOUS WASTE CLEANUP PROJECT DATABASES	4
4.1	Site Identification Data Elements	5
4.2	Contact Data Elements	5
4.3	Location Data Elements	6
4.4	Contaminant/Media Data Elements	7
4.5	State Hazardous Waste Cleanup Data Logical Model	9

EXHIBITS

Exhibit 1.	Site Identification Data Element Definition	5
Exhibit 2.	Contact Data Element Definition	6
Exhibit 3.	Location Data Element Definition	6
Exhibit 4.	Contaminant/Media Data Element Definition	7
Exhibit 5.	Remediation Technology Data Element Definition	9

APPENDIXES

APPENDIX A	State Hazardous Waste Cleanup Data Logical Model
APPENDIX B	State Level Data Elements
APPENDIX C	Group Data Elements
APPENDIX D	List of Acronyms

1.0 INTRODUCTION

1.1 Background

The Information Management Center (IMC) is the leader for information management, office automation, and program measurement functions throughout the U.S. Environmental Protection Agency's (EPA) Office of Emergency and Remedial Response (OERR) under Superfund. IMC recognizes that developing innovative ways to share and manage hazardous waste cleanup information among state governments, interest groups, private businesses, and the federal government is critical to the success of the Superfund program. Specifically, IMC envisions that effective information sharing will enable these stakeholders and the public to: compare cleanup information, including cleanup technology descriptions, vendor contact information, and cost effectiveness data, across like sites; simultaneously access hazardous waste information across multiple states; and use quantitative information to report on hazardous waste cleanup progress on both a national level and within a particular state.

Because hazardous waste cleanup activities are governed by different implementing regulations, and the data is stored in different information systems across the federal and state governments, information often cannot be shared successfully. As a result, IMC worked with the Association of State and Territorial Solid Waste Management Officials (ASTSWMO) to identify several state partners to begin developing common and consistent cleanup language. Through facilitated information gathering sessions, these state partners provided IMC with information about their hazardous waste cleanup regulations, data management systems, and existing data elements. This report builds on those sessions as well as on investigation of three state and one federal data set of hazardous waste cleanup data.

1.2 Purpose

The purpose of this report is to recommend potential data elements for state hazardous waste cleanup databases. Such elements will be registered in EPA's Environmental Data Registry (EDR). The purpose of the EDR is to promote the collection of data in a consistent fashion through the use of standard data elements in information systems. Standards promote the reuse of information, which can save the considerable expense of collecting multiple sets of accurate, verified data.

Analysis of the data from the participating states identified several opportunities where existing data elements in the EDR could be improved to better enable data sharing in the hazardous waste cleanup community. Changes to definitions for many EDR data elements are proposed in the interest of establishing well-formed hazardous waste cleanup data elements.

1.3 Scope

The scope of this document is limited to proposing a potential set of data elements for use in state hazardous waste cleanup databases, developed as part of state hazardous waste cleanup efforts. All recommended data elements will be described and registered in the EDR.

2.0 METHODOLOGY

The Systems Development Center (SDC) was tasked with developing a group of well-formed data elements for use in state hazardous waste cleanup databases. SDC reviewed the hazardous waste cleanup data sets submitted by each of 3 states (i.e., Missouri, New Jersey, and Texas) as well as the data included in EPA's Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS3). Data were reviewed for current content and future requirements. Additionally, SDC staff reviewed the proposed queries generated at IMC's March 1999 Key Concepts Dictionary for Hazardous Waste Cleanup Facilitated Gathering Session. These queries were designed to retrieve information from state data sets that were of interest to other states. This review enabled the SDC to further understand state stakeholder needs and requirements. Sample proposed queries included:

- Provide a list of sites in state x, county y, that are contaminated with z.
- Show media contaminated and contaminants for specific sites.
- Provide a list of sites and contact information where cleanup involves the use of technology x.

Data element content was compared with the data elements currently stored in the EDR, as well as existing information present in other EPA databases. Comparisons were made by populating a Microsoft Access database and categorizing similar data elements into categories to form entities.

As a result, there were five entities identified as the minimum set of data elements required for states to share information among state hazardous waste cleanup databases. These included 1) site identification, 2) contact information, 3) location, 4) contaminant/media, and 5) remediation technology. SDC developed a logical model to visually depict the relationship between these entities (and their associated data elements) as described in the text. This model is found in Appendix A - State Hazardous Waste Cleanup Data Logical Model.

3.0 SOURCES OF STATE HAZARDOUS WASTE CLEANUP DATA SETS

The following are summaries of the hazardous waste cleanup data sets provided by Missouri, New Jersey and Texas, and the EPA CERCLIS3 system. Appendix B contains a full description of state level data elements.

Metadata information was obtained from the State of Missouri Department of Natural Resources (MODNR) as part of the Hazardous Waste Cleanup for Information Sharing project. MODNR provided 47 hazardous waste cleanup data elements. Source information systems include Site Management and Resource System (SMARS) and Petroleum Storage Tanks System (PSTS). Both systems are maintained by the MODNR.

SMARS is an MS Access database which tracks Superfund and Voluntary Cleanup Program (VCP) information. PSTS (in FoxPro converting to MS Access) tracks all above and below ground storage tank data.

Metadata information was obtained from the State of New Jersey Department of Environmental Protection (NJDEP) as part of the State Hazardous Waste Cleanup for Information Sharing project. NJDEP provided 33 hazardous waste cleanup data elements. Source systems include Hazardous Site Database Submittal System (HAZSITE), Site Remediation Integrated Data System (GEDI), and Department of Environmental Protection Masterfile (DEPMAST). All three systems are maintained by the NJDEP.

HAZSITE is a data collection tool made available to interested parties by the Site Remediation Program (SRP) for the collection and submission of sampling data from contaminated sites in New Jersey that are under SRP management or oversight. GEDI is the SRP central database that supports the SRP's applications and provides for program-wide consistent and accurate reporting of SRP activities. DEPMAST is a temporary database that enables the SRP to develop software from the Departmental Masterfile.

Metadata information was obtained from the Texas Natural Resources Conservation Commission (TNRCC) as part of the State Hazardous Waste Cleanup for Information Sharing project. TNRCC provided 30 hazardous waste cleanup data elements. Source systems include Corrective Action Case Tracking System (CACTS), Voluntary Cleanup Program database (VOLCLEAN), and Federal and State Superfund Site Data database (SISDATA). TNRCC maintains all three of these systems.

CACTS is an information system designed to store Superfund related information for sites in the state of Texas. VOLCLEAN is an information system that stores data related to voluntary cleanup sites in the state of Texas. SISDATA stores data related to Federal and State Superfund sites located in Texas.

CERCLIS3, maintained by EPA, is an automated inventory of abandoned, inactive, or uncontrolled hazardous waste sites regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The system also tracks areas where there has been a hazardous substance release that may require evaluation or cleanup by the Superfund program. CERCLIS3 is used to record information about all phases of hazardous waste sites from initial discovery to listing on the National Priorities List (NPL). The CERCLIS3 data elements registered in the EDR (and subsequently used in preparing this report) are only a subset of the CERCLIS3 system data elements.

4.0 SUGGESTED DATA ELEMENTS FOR STATE HAZARDOUS WASTE CLEANUP PROJECT DATABASES

State environmental agencies collect and make available diverse data regarding hazardous waste cleanup efforts in their respective states. As hazardous waste cleanup data is primarily compiled and distributed locally, standardization in the data collection and distribution phases will allow for the comparison and analysis of hazardous waste cleanup data across state data sets. The following data elements are suggested as a starting point, or a minimum set of well-formed data elements, for use in the development of state hazardous waste cleanup databases.

The data elements for the state hazardous waste cleanup project are described in the following five sections. They have been categorized into these subsections to aid the user in determining the proper use of each data element. The data element name, EDR data element number and version, and a short description of each data element's use is included. Section 4.1 describes data elements related to site identification; Section 4.2 details the data elements used to describe and locate contact information; Section 4.3 describes the data elements associated with locational information; Section 4.4 describes contaminant and media related data; and Section 4.5 describes remediation technology data elements. Underlined data element names represent data elements that are included in current EPA standards. Further descriptive information and acceptable values for each data element can be found on the EDR Web site at <http://www.epa.gov/edr/>

Each data element is described by its name, definition, data element, number and version number (DE#: Version), and source.

4.1 Site Identification Data Elements

The following site identification data elements are suggested to store information in state hazardous waste cleanup databases. Although additional data elements were suggested by states, the following list was developed as the least common denominator or minimum set. The number of data elements is limited to allow for straight forward and simple identification of hazardous waste cleanup sites.

Site Identification Data Element Name	Site Identification Data Element Definition	EDR DE#: version	Source
Cleanup Site Name	The official name for a hazardous waste site or an unanticipated removal (incident).	TBD	
Cleanup Site Identification Number	A unique numerical identifier for a hazardous waste cleanup site.	TBD	
Cleanup Site Description Text	The text that describes a hazardous waste cleanup site. This can be an alternative, local, commonly-used, or alias name.	TBD	
NPL Status Code	A code identifying a site s status on the Superfund National Priorities List (NPL).	62322:1	EDR
Facility Identification (Group)	The group of data elements that properly identify the location, the affiliated organizations, individual business activities, and the environmental interest of a facility site.	See Appendix C	
Business Classification (Group)	A set of data elements used to classify business activities, including industry classifications, product classifications, products, and operations.	See Appendix C	

Exhibit 1. Site Identification Data Element Definition

4.2 Contact Data Elements

The following data elements are suggested to store contact information in state hazardous waste cleanup databases. Although many variations are possible for contact information, and many data elements currently exist regarding contact data elements, the following list was chosen for simplicity and comprehensiveness across the surveyed state data systems.

Contact Data Element Name	Contact Data Element Definition	EDR DE#: version	Source
Person Name Prefix Text	The text that describes the title that precedes a person's name.	5418:1	EDR
Person Given Name	The first name and the middle name or initial of a person's name.	5416:1	EDR
Person Last Name	The surname of a person's name.	5414:1	EDR
Telephone Number Type Name	The name that describes telephone number types.	6161:1	EDR
Telephone Number	The telephone number of the person who serves as a point of contact.	5706:1	EDR
Point of Contact Role Name	The name of the capacity or function that a point of contact serves.	6107:1	EDR

Exhibit 2. Contact Data Element Definition

4.3 Location Data Elements

The suggested data elements below are for storing location information in state hazardous waste cleanup databases. The table describes four element groups. See Appendix C for Data elements, definitions and EDR DE#: version of each Geographic (Group), Mailing Address (Group), Latitude/Longitude (Group), and Political/Economic Jurisdiction (Group).

Location Data Element Name	Location Data Element Definition	EDR DE#: version	Source
Geographic Address (Group)	A set of precise and complete information that describes the physical location of an establishment.	See Appendix C	
Mailing Address (Group)	A set of data elements that can be used to create a mailpiece.	See Appendix C	
Latitude/Longitude (Group)	The group of data elements used for recording horizontal and vertical coordinates and associated metadata that define a point on earth.	See Appendix C	
Political or Economic Jurisdiction (Group)	The group of identification codes that signify the congressional, legislative, census, or other type of jurisdiction where a hazardous waste cleanup site is located.	See Appendix C	

Exhibit 3. Location Data Element Definition

4.4 Contaminant/Media Data Elements

The following data elements were suggested by states for use in electronic references to contaminants and contaminated media in state hazardous waste cleanup databases.

Contaminant/ Media Data Element Name	Contaminant/Media Data Element Definition	EDR DE#: version	Source
<u>Chemical Abstracts Service Registry Number</u>	The unique number assigned by Chemical Abstracts Service (CAS) to a chemical substance.	6165:1	EDR
<u>Chemical Substance Systematic Name</u>	The name assigned to a chemical substance that describes it in terms of its molecular composition.	5799:1	EDR
<u>EPA Chemical Registry Name</u>	The name that the Environmental Protection Agency has selected as its preferred name for a chemical substance.	5801:1	EDR
Contaminant Group Name	The name of the primary contaminant group into which the contaminant is classified.	20838:1	EDEN (from CERCLIS3)
Media Code	A code identifying a contaminated medium at a site.	62305:1	CERCLIS3
Media Description	The name of a contaminated medium at a site.	62321:1	CERCLIS3

Exhibit 4. Contaminant/Media Data Element Definition

Special attention is called to the data element, Contaminant Group Name as the current value domain is unspecified. SDC reviewed existing sources of Contaminant Group Names for potential value domains. Descriptions of two sources and the current value domains from these sources are presented below. The two sources are EPA's Remediation and Innovation Characterization Technologies (REACH IT) database and the Federal Remediation Technologies Roundtable (FRTR).

EPA REACH IT, sponsored by EPA's Technology Innovation Office, is a new system that lets environmental professionals use the power of the Internet to search, view, download, and print information about innovative remediation and characterization technologies. EPA REACH IT provides information about more than 750 service providers that offer almost 1,300 remediation technologies and more than 150 characterization technologies. EPA REACH IT combines information from three established EPA databases, the Vendor Information System for Innovative Treatment Technologies, the Vendor Field Analytical and Characterization Technologies System, and the Innovative Treatment Technologies, to give users access to

comprehensive information about treatment and characterization technologies and their applications. Additionally, REACH IT considers information provided by the U.S. Department of Defense (DoD), the U.S. Department of Energy (DOE), and state project managers about sites at which innovative technologies are being deployed. EPA REACH IT can be accessed through the Internet at <http://www.epareachit.org>.

FRTR is an interagency work group that provides a forum for exchanging information about the development and demonstration of innovative technologies for the remediation of hazardous waste sites. The forum also synthesizes the technical knowledge that federal agencies have compiled and provides a comprehensive record of the cost and performance of the technologies. Participating agencies include the DoD, the U.S. Army Corps of Engineers (USACE), the U.S. Navy (USN), the U.S. Air Force (USAF), the DOE, the U.S. Department of the Interior (USDI), and EPA. FRTR can be accessed through the Internet at <http://www.frtr.gov>.

Contaminant Group Names from EPA REACH IT:

Benzene, toluene, ethylbenzene, and xylene (BTEX)	Nonhalogenated semivolatiles
Dioxins/furans	Nonhalogenated volatiles
Explosives/propellants	Nonmetallic toxic elements
Halogenated semivolatiles	Organic corrosives
Halogenated volatiles	Organic pesticides/herbicides
Heavy metals	Polychlorinated biphenyls (PCBs)
Inorganic corrosives	Polynuclear aromatic hydrocarbons (PAHs)
Inorganic cyanides	Solvents

Contaminant Group Names from FRTR:

Asbestos	Organic cyanides
BTEX	Organic corrosives
Dioxins/furans	Organic pesticides/herbicides
Explosives/propellants semivolatiles	Organometallic compounds
Halogenated volatiles	PCBs
Heavy metals	Pesticides/herbicides
Inorganic cyanides	Phthalates
Inorganic compounds	Radioactive elements
Ketones	Radionuclides
Nonhalogenated volatiles	Radon
Halogenated	Styrene
Nonmetallic elements	TPH
Organic compounds	

4.5 Remediation Technology Data Elements

The following data elements are suggested for use to store response technology information in state hazardous waste cleanup databases.

Remediation Technology Data Element Name	Remediation Technology Data Element Definition	EDR DE#: version	Source
Remediation Technology Group Code	A code identifying the broad-based group to which a hazardous waste remediation technology belongs.	TBD	EDR
Remediation Technology Group Name	A text description of the broad-based group to which a hazardous waste remediation technology belongs.	TBD	EDR
Remediation Technology Type Code	A code identifying the remediation technology applied to cleanup or mitigate a contaminated medium at a site.	TBD	EDR
Remediation Technology Type Name	The name of a remediation technology applied to cleanup or mitigate contamination at a hazardous waste site.	TBD	EDR

Exhibit 5. Remediation Technology Data Element Definition

Remediation technologies are described in a variety of ways. Value domains from three sources, CERCLIS3, EPA REACH IT, and FRTR, are listed below for consideration. This is an area for standardization review.

Remediation Technology Group Description from CERCLIS3:

Air emissions/off-gas treatment	Physical/chemical treatment (ex-situ - assuming excavation)
Biological treatment (ex-situ - assuming pumping)	Physical/chemical treatment (ex-situ)
Biological treatment (ex-situ - assuming excavation)	Physical/chemical treatment (in-situ)
Biological treatment (in-situ)	Residuals (secondary) treatment
Institutional controls	Thermal treatment (ex-situ - assuming excavation)
Other	Thermal treatment (ex-situ)
Physical/chemical treatment (ex-situ - assuming pumping)	Thermal treatment (in-situ)

Remediation Technology Group Description from EPA REACH IT:

Soil Technologies:	Physical separation
Bioremediation (ex-situ)	Phytoremediation
Bioremediation (in-situ)	Plasma High-Temperature Metals Recovery
Bioventing	Slurry-Phase Bioremediation
Chemical treatment	Soil vapor extraction
Contained Recovery of Oily Wastes	Soil washing
Cyanide oxidation	Solidification/stabilization
Dechlorination	Solvent extraction
Flushing	Surfactant flushing
Hot air injection	Thermal desorption
Incineration (off-site)	Vitrification
Incineration (on-site)	

Groundwater Treatment Technologies:

Air sparging	Oxidation (in-situ)
Bioremediation (in-situ)	Passive treatment wall
Dual-phase extraction	

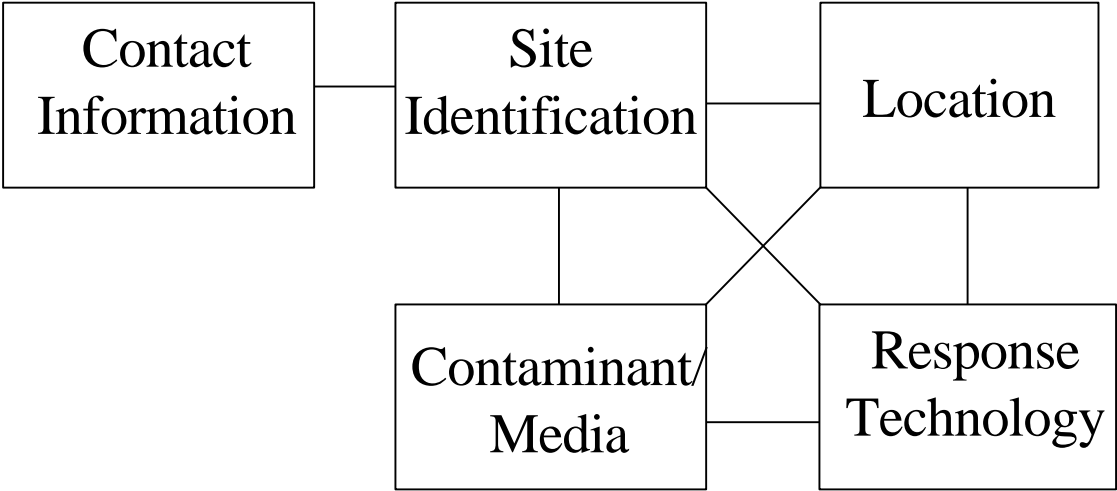
Remediation Technology Group Description from FRTR:

Air Emissions/Off-Gas Treatment	Physical/Chemical Treatment for Soil, Sediment, and Sludge (ex-situ)
Biological Treatment for Soil, Sediment, and Sludge (in-situ)	Physical/Chemical Treatment for Ground Water, Surface Water, and Leachate (ex-situ)
Biological Treatment for Ground Water, Surface Water, and Leachate (in-situ)	Thermal Treatment for Soil, Sediment, and Sludge (in-situ)
Biological Treatment for Soil, Sediment, and Sludge (ex-situ)	Thermal Treatment for Soil, Sediment, and Sludge (ex-situ)
Biological Treatment for Ground Water, Surface Water, and Leachate (ex-situ)	Containment for Soil, Sediment, and Sludge
Physical/Chemical Treatment for Soil, Sediment, and Sludge (in-situ)	Containment for Ground Water, Surface Water, and Leachate
Physical/Chemical Treatment for Ground Water, Surface Water, and Leachate (in-situ)	Other Treatment Technologies for Soil, Sediment, and Sludge

APPENDIX A

State Hazardous Waste Cleanup Data Logical Model

APPENDIX A
State Hazardous Waste Cleanup Data Logical Model



APPENDIX B

State Level Data Elements

APPENDIX B

State Level Data Elements

Site Identification Data Element Definitions

Site Identification Data Element Name	Site Identification Data Element Definitions	EDR DE#: version	Source State/System
<i>Cleanup Site Name</i>			
Site Name	The official name for a hazardous waste site or an unanticipated removal (incident). The official name can be the one published in the Federal Register at the time of proposal to the NPL or, for sites not on the NPL, designated by the EPA Region.	62729:1	CERCLIS3
Site Name	The official name for a hazardous waste site or an unanticipated removal (incident).	32419:1	MODNR
Name	Alternative name for site or for case.	26095:1	NJDEP
Location Name	Name of a location of interest to the agency.	32498:1	TNRCC
<i>Cleanup Site Identification Number</i>			
Site ID	A unique identifier for a site or facility, assigned by the CERCLIS/WasteLAN application and unique to CERCLIS/WasteLAN.	62728:1	CERCLIS3
LUST ID Number	This field is used to distinguish each individual LUST record.	32404:1	MODNR
Site Management Number	A unique identifier for the site, generated by the system and specific to SMARS.	32403:1	
CSL ID	The current assigned CSL ID or EPA ID, if available.	26075:1	NJDEP
SP X-Coord	State Plane X Coordinate.	29551:1	
SP Y-Coord	State Plane Y Coordinate.	29552:1	
Location GIN	A geographic information system (GIS) generated geographic identification number (GIN) that represents a unique location.	32489:1	TNRCC
<i>Site Description</i>			
Site Directions	Directions or other information used to locate a site.	62727:1	CERCLIS3

Site Identification Data Element Name	Site Identification Data Element Definitions	EDR DE#: version	Source State/System
Site Alias	The name of the site or portion of the site other than the official name.	32420:1	MODNR
Name	This can be the name of an owner [company] of a facility depending on which table is being used.	32421:1	
Block	Block ID for site.	29531:1	NJDEP
Lot	Lot ID for site.	29532:1	
Local Name Description	Local name description.	26201:1	
Location Description	Physical location description.	29530:1	
Access Description	Text containing directions to a location.	32568:1	TNRCC
<i>NPL Status Code</i>			
NPL Status Code	A code identifying a site's status on Superfund's National Priorities List.	62322:1	CERCLIS3
No Information Provided			MODNR
No Information Provided			NJDEP
No Information Provided			TNRCC
<i>Facility Identification</i>			
No Information Provided			CERCLIS3
No Information Provided			MODNR
No Information Provided			NJDEP
No Information Provided			TNRCC
<i>Business Classification</i>			
SIC Code	All standard SIC codes or variants.	20842:1	EDEN (from CERCLIS3)
Site Operations	Land usage at a site.	32487:1	MODNR
SIC Code	SIC Code.	29533:1	NJDEP
NAICS Code	North American Industry Classification System (NAICS) code used to define business orientation for a particular location (previously referred to as SIC code).	32572:1	TNRCC

Contact Data Element Name	Contact Data Element Definition	EDR DE#: version	Source
<i>Person Name Prefix Text</i>			
No Information Provided			CERCLIS3
No Information Provided			MODNR
No Information Provided			NJDEP
Name Prefix	Individual's beginning name title.	32493:1	TNRCC
Name Suffix	Additional title that indicates lineage or professional title.	32494:1	
<i>Person Given Name</i>			
Person Given Name	The first name and the middle name or initial of a person's name.	5416:1	(a)
No Information Provided			MODNR
No Information Provided			NJDEP
First Name	Individual's given name.	32492:1	TNRCC
<i>Person Last Name</i>			
Person Last Name	The surname of a person's name.	5414:1	(a)
Contact Person	This can be the contact of a facility or LUST contact person depending on which table is being used.	32405:1	MODNR
Site Manager Name	The name of the person who is the manager of a site.	32407:1	
Site OOP (Owner, Operator, PRP) Contact Person	The primary contact for a business or organization identified as site owner, operator, and PRP (Potentially-Responsible Party).	32414:1	
No Information Provided			NJDEP
Last Name	Individual's surname.	32491:1	TNRCC
<i>Telephone Number Type Name</i>			
No Information Provided			CERCLIS
No Information Provided			MODNR
No Information Provided			NJDEP
Type	Indicates the type of electronic communication that this occurrence represents.	32495:1	TNRCC
<i>Telephone Number</i>			
Telephone Number	The telephone number of the person who is the point of contact for an establishment.	5706:1	(a)

Contact Data Element Name	Contact Data Element Definition	EDR DE#: version	Source
Site OOP (Owner, Operator, PRP)Telephone	The telephone number of the site owner, operator, and PRP (Potentially-Responsible Party).	32415:1	MODNR
Area Code	This is the area code for the contact person.	32416:1	
Phone Prefix Number	This is the prefix part of the phone number for the contact person.	32417:1	
Phone Suffix Number	This is the suffix part of the phone number for the contact person.	32418:1	
No Information Provided			NJDEP
Telephone Area Code	Represents a particular phone service area.	32496:1	TNRCC
Telephone Number	Phone number of the contact or client, including the 3-digit exchange and the 4-digit suffix.	32497:1	
Point of Contact Role Name			
Point of Contact Role Name	The name of the capacity or function that a point of contact serves for a business object.	6017:1	(b)
Site Manager Type	The particular type of manager at a site.	32408:1	MODNR
Role Description	Role Code designations completely spelled out.	26076:1	NJDEP
Contact ID	System generated number used internally by the system that uniquely identifies a contact.	32490:1	TNRCC

- (a) Data Standard for Representation of Address Information
- (b) Analysis of Washington State Facility/Site Data Elements and Domains

Location Data Elements

Location Data Element Name	Location Data Element Definition	EDR DE#: version	Source
<i>Geographic Address</i>			
<i>No Information Provided</i>			CERCLIS3
Address	This can be the address of an owner or facility depending on which table is being used.	32430:1	MODNR
City	This can be the city of an owner or facility depending on which table is being used.	32427:1	
County	This is the county of a facility.	32422:1	
State	This field indicates the state in which the entity exists.	32429:1	
Zip Code	This can be the zip of an owner or facility depending on which table is being used.	32432:1	
<i>No Information Provided</i>			NJDEP
<i>No Information Provided</i>			TNRCC
<i>Mailing Address</i>			
<i>No Information Provided</i>			CERCLIS3
Site Address	Site street, mailing or descriptive address.	32431:1	MODNR
Site City	The name of the city, town, village or other municipality where the site is located or the incident occurs, or the nearest geographical place name within a formal jurisdiction.	32428:1	
Site County	The name of a U.S. county or county equivalent.	32423:1	
Site Zip Code	The code that represents the U.S. Postal Service Zone Improvement Program (ZIP) area where the mail is delivered.	32433:1	

Location Data Element Name	Location Data Element Definition	EDR DE#: version	Source
Line 1 Address Description	First line of address.	29524:1	NJDEP
Line 2 Address Description	Second line of address.	29525:1	
Line 3 Address Description	Third line of address.	29526:1	
Street Address ID	Street Address ID.	29527:1	
Mail Address ID	Mail Address ID.	29528:1	
County Code	County Code.	26113:1	
County Description	County Description.	26136:1	
State or Country Code	State or Country Code.	29515:1	
State or Country Description	State or Country Description.	29519:1	
State or Country Indicator	State or Country Indicator.	29523:1	
Zip Code	Zip Code.	29524:1	

Location Data Element Name	Location Data Element Definition	EDR DE#: version	Source
Street Number	Block portion of the street address.	32563:1	TNRCC
Street Pre-Directional	Compass direction of the street address that occurs before the street name.	32564:1	
Street Name	Street name or post office box designation.	32565:1	
Street Type	Street type.	32566:1	
Street Post-Directional	Compass direction of the street address that occurs after the street name.	32567:1	
City	The municipality or town used for standard address information.	32569:1	
County Code	Three-digit FIPS county code from a lookup table.	32499:1	
State	Standard two-character US Postal Service abbreviation for state.	32500:1	
Zip	First 5 digits of the US Postal Service zip code.	32570:1	
Zip Extension	Four-digit extension assigned by the US postal service.	32571:1	

Location Data Element Name	Location Data Element Definition	EDR DE#: version	Source
Latitude/Longitude			
No Information Provided			CERCLIS3
Latitude Degrees	This field tracks the latitude degree information.	32434:1	MODNR
Latitude Minutes	This field tracks the latitude minutes information.	32435:1	
Latitude Seconds	This field tracks the latitude seconds information.	32436:1	
Latitude Degrees	This field tracks the latitude degree information.	32437:1	
Latitude Direction	This field tracks the latitude direction information.	32438:1	
Longitude Degrees	This field tracks the longitude degree information.	32439:1	
Longitude Minutes	This field tracks the longitude minutes information.	32440:1	
Longitude Seconds	This field tracks the longitude seconds information.	32441:1	
Longitude Degrees	This field tracks the longitude degree information.	32442:1	
Longitude Direction	This field tracks the longitude direction information.	32443:1	
Latitude Degrees	Latitude Degrees	29545:1	NJDEP
Latitude Minutes	Latitude Minutes.	29546:1	
Latitude Seconds	Latitude Seconds.	29547:1	
Longitude Degrees	Longitude Degrees.	29548:1	
Longitude Minutes	Longitude Minutes.	29549:1	
Longitude Seconds	Longitude Seconds.	29550:1	
Location Latitude	The value in decimal degrees of a location, using the North American Datum of 1983 (range between -90 and +90).	32588:1	TNRCC
Location Longitude	The value in decimal degrees of a location, using the North American Datum of 1983 (range between -180 and +180).	32589:1	
Political or Economic Jurisdiction			
No Information Provided			CERCLIS3

Location Data Element Name	Location Data Element Definition	EDR DE#: version	Source
U.S. Congressional District	The number that represents a Congressional District for a state within the United States.	32424:1	MODNR
Missouri Senatorial District	The number that represents a Senatorial District within the state of Missouri.	32425:1	
Missouri House District	The number that represents a House Legislative District within the state of Missouri.	32426:1	
Congressional District Code	Congressional District Code.	26096:1	NJDEP
Congressional District Description	Congressional District Description.	26112:1	
Legislative District Code	NJ Legislative District Code.	26159:1	
Legislative District Description	NJ Legislative District Description.	26200:1	
<i>No Information Provided</i>			TNRCC

Contaminant/Media Data Elements

Contaminant/ Media Data Element Name	Contaminant/Media Data Element Definition	EDR DE #: version	Source
Contaminant Name			
Hazardous Substance Name	The contaminant name associated with a given chemical identification number.	59742:1	CERCLIS3
Site Contaminant	The name of a contaminant at a site.	32466:1	MODNR
Hazardous Substance Name	This field is used to track the substance currently or last stored in a tank.	32462:1	
Substance currently or last stored	This field is used to tack the hazardous substance name of the hazardous material that is stored in a tank.	32455:1	
Mixture of Hazardous Substances	This field is used to track if the hazardous substance is a mixture of hazardous products.	32463:1	
No Information Provided			NJDEP
Contaminants Identified	Individual contaminants identified.	32574:1	TNRCC
Contaminants Identified	Individual contaminants.	32576:1	
Contaminant Number			
Hazardous Substance Number	The CAS (Chemical Abstract Service) number, or other identification number for a hazardous substance.	59743:1	CERCLIS3
CAS Number of Hazardous Substance	This field is used to track the CAS number associated with the hazardous substance that is stored in the tank.	32454:1	MODNR
Chemical Abstracts Service Number	NJDEP uses standard CAS reference numbers. See EDR #6165 for permissible values.	29544:1	NJDEP
No Information Provided			TNRCC
Contaminant Group Name			
Contaminant Group Name	The name of the primary contaminant group into which the contaminant is classified.	20838:1	EDEN (from CERCLIS3)
No Information Provided			MODNR
No Information Provided			NJDEP
Contaminant Categories	No definition was provided.	32573:1	TNRCC
Contaminant Categories	No definition was provided.	32575:1	

Contaminant/ Media Data Element Name	Contaminant/Media Data Element Definition	EDR DE #: version	Source
<i>Media Code</i>			
Contaminated Media Code	A code identifying a contaminated medium at a site.	62305:1	CERCLIS3
<i>No Information Provided</i>			MODNR
<i>No Information Provided</i>			NJDEP
<i>No Information Provided</i>			TNRCC
<i>Media Description</i>			
Contaminated Media Description	The name of a contaminated medium at a site.	62321:1	CERCLIS3
Media	This field is used to track the types of media affected at a LUST site.	32444:1	MODNR
Site Contaminated Media	The name of a contaminated medium at a site.	32453:1	
Matrix	Media that is associated with the sampling event.	29534:1	NJDEP
Media Affected	No definition was provided.	32577:1	TNRCC
Media Affected	No definition was provided.	32582:1	

Response Technology Data Element Name	Response Technology Data Element Definition	EDR DE#: version	Source
<i>Remediation Technology Group Code</i>			
Response Type Group Code	A code identifying the group to which a response technology belongs.	62470:1	CERCLIS3
<i>No Information Provided</i>			MODNR
<i>No Information Provided</i>			NJDEP
<i>No Information Provided</i>			TNRCC
<i>Remediation Technology Group Name</i>			
Response Type Group Description	A group to which a response technology belongs.	62486:1	CERCLIS3
<i>No Information Provided</i>			MODNR
<i>No Information Provided</i>			NJDEP
<i>No Information Provided</i>			TNRCC
<i>Remediation Technology Type Code</i>			
Response/ Technology Type Code	A code identifying the response technology applied to clean up a contaminated medium at a site.	58452:1	CERCLIS3
<i>No Information Provided</i>			MODNR
<i>No Information Provided</i>			NJDEP
<i>No Information Provided</i>			TNRCC
<i>Remediation Technology Type Name</i>			
Response/ Technology Type Name	The name of a technology used to mitigate hazardous contamination.	59465:1	CERCLIS3
LUST Remedial Techniques	This field tracks the different types of remedial techniques being used to clean up the site.	32467:1	MODNR
VCP Remediation Type	The type of remediation used at a VCP site.	32485:1	
Site Technology	The name of the technology used to mitigate hazardous contamination.	32486:1	
<i>No Information Provided</i>			NJDEP
<i>No Information Provided</i>			TNRCC

APPENDIX C

Group Data Elements

APPENDIX C

Group Data Elements

Facility Identification Data Elements

Facility Identification Data Element Name	EDR Identifier
North American Industry Classification System (NAICS) Code	5855:1
Standard Industrial Classification (SIC) Code	5338:1
Affiliation Type	23887:1
Country Name	9:1
County Name	32388:1
County and State Code	11:1
Environmental Information System Abbreviated Name	5712:1
Environmental Information System Identification Number	5444:1
Environmental Interest End Date	32390:1
Environmental Interest End Date Qualifier	32395:1
Environmental Interest Start Date	5981:1
Environmental Interest Start Date Qualifier	32393:1
Environmental Interest Type	6163:1
Facility Registry Identifier	32387:1
Facility Site Name	5720:1
Geometric Type Code	5614:1
Geometric Type Name	5761:1
Horizontal Accuracy Measure	5264:1
Horizontal Collection Method Code	5238:1
Horizontal Collection Method Text	5731:1
Horizontal Reference Datum Code	5308:1
Horizontal Reference Datum Name	5292:1
Individual Full Name	32400:1
Individual Title Text	5452:1
Latitude Measure	5518:1
Locality Name	32391:1
Location Address	6187:1
Location ZIP Code/ International Postal Code	32389:1
Longitude Measure	5520:1
Mailing Address	6183:1

Facility Identification Data Element Name	EDR Identifier
Mailing Address City Name	5450:1
Mailing Address Country Name	5394:1
Mailing Address State Name	5386:1
Mailing Address ZIP Code/International Postal Code	32398:1
NAICS Primary Indicator	32401:1
Organization DUNS Number	32399:1
Organization Formal Name	32397:1
Reference Point Code	5608:1
Reference Point Text	5288:1
SIC Primary Indicator	23907:1
Source Map Scale Number	5318:1
State Facility Identifier	6123:1
State Name	42:1
Supplemental Address Text	6185:1
Supplemental Location Text	6173:1
Tribal Land Name	48:1

Business Classification Data Elements

Business Classification Data Element Name	EDR Identifier
North American Industry Classification System (NAICS) Group Code	5849:1
North American Industry Classification System (NAICS) Industry	5851:1
North American Industry Classification System (NAICS) Sector Code	5847:1
North American Industry Classification System (NAICS) Subsector	5853:1
North American Industry Classification System (NAICS) Code	5855:1
Standard Industrial Classification (SIC) Code	5338:1
Standard Industrial Classification (SIC) Division Code	5861:1
Standard Industrial Classification (SIC) Group	5865:1
Standard Industrial Classification (SIC) Major Group Code	5869:1
Standard Industrial Classification (SIC) Subdivision Text	5867:1

Address Data Elements: Geographic

Geographic Location Data Element Name	EDR Identifier
Geographic Address City Name	5406:1
Geographic Address Country Code	5402:1
Geographic Address State Code	5384:1
Geographic Address ZIP Code	5658:1
Geographic Address Highway Contract Text	5662:1
Geographic Address International Postal Code	5664:1
Geographic Address Rural Route Text	5468:1
Geographic Address Street Text	5460:1
Supplemental Location Text	6173:1
Geographic Address Building Name	5380:1
Geographic Address Country Name	5400:1
Geographic Address County Name	5470:1
Geographic Address Descriptive Text	5694:1
Geographic Address State Name	5382:1
Geographic Address State and County Code	5656:1
Geographic Address ZIP + 4 Extension Code	5390:1
Line 1	
Building Number	5777:1
Pre-Directional Code	5779:1
Street Name	5781:1
Street Suffix Code	5783:1
Post-Directional Code	5785:1
Secondary Unit Code	5789:1

Address Data Elements: Mailing

Geographic Location Data Element Name	EDR Identifier
Mailing Address City Name	5450:1
Mailing Address State Code	5408:1
Mailing Address ZIP Code	5388:1
Mailing Address Person Given Name	21299:1
Mailing Address Person Last Name	21300:1
Mailing Address Person Name Prefix Text	21297:1
Mailing Address Highway Contract Route Text	5652:1
Mailing Address Post Office Box Number	5466:1
Mailing Address Rural Route Text	5648:1
Mailing Address Street Text	5462:1
Mailing Address Country Name	5394:1
Mailing Address State Name	5386:1
Mailing Address Building Name	5378:1
Mailing Address Country Code	5396:1
Mailing Address County Name	5448:1
Mailing Address Zip + 4 Extension Code	5654:1
Line 1	
Building Number	5777:1
Pre-Directional Code	5779:1
Street Name	5781:1
Street Suffix Code	5783:1
Post-Directional Code	5785:1
Secondary Unit Code	5789:1
Mailing Address International Postal Code	21305:1
Mailing Address Organization Name	21303:1
Mailing Address Person Name Qualifier Text	21301:1
Mailing Address Supplemental Text	21304:1

Latitude/Longitude Data Elements

Latitude/Longitude Data Element Name	EDR Identifier
Coordinate Data Source Code	5310:1
Coordinate Data Source Name	5322:1
Data Collection Date	5296:1
Geometric Type Code	5614:1
Geometric Type Name	5761:1
Horizontal Accuracy Measure	5264:1
Horizontal Collection Method Code	5238:1
Horizontal Collection Method Text	5731:1
Horizontal Reference Datum Code	5308:1
Horizontal Reference Datum Name	5292:1
Latitude Measure	5518:1
Location Comments Text	5616:1
Longitude Measure	5520:1
Reference Point Code	5608:1
Reference Point Text	5288:1
Source Map Scale Number	5318:1
Verification Method Code	5268:1
Verification Method Text	5737:1
Vertical Accuracy Measure	5312:1
Vertical Collection Method Code	5314:1
Vertical Collection Method Text	5326:1
Vertical Measure	5612:1
Vertical Reference Datum Code	5306:1
Vertical Reference Datum Name	5324:1
Data Point Sequence Number	5266:1
Horizontal Accuracy Unit Name	5759:1
Horizontal Accuracy Unit of Measure Code	5606:1
Source Map Scale Code	5316:1

Political or Economic Jurisdiction Data Elements

Political or Economic Jurisdiction Data Element Name	EDR Identifier
Congressional District Number	6153:1
Legislative District Number	6157:1
Tribal Land Name	48:1
Standard Metropolitan Statistical Areas (SMSA)	
Alt CMSA FIPS Code	32947:1
CMSA FIPS Code	32590:1
MSA FIPS Code	32610:1
PMSA FIPS Code	32870:1
1990 Census Block Code	5250:1

APPENDIX D

List of Acronyms

APPENDIX D

List of Acronyms

ASTSWMO	Association of State and Territorial Solid Waste Management Officials
BTEX	Benzene, toluene, ethylbenzene, and xylene
CACTS	Corrective Action Case Tracking System
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS3	Comprehensive Environmental Response, Compensation, and Liability Information System
DEPMAST	Department of Environmental Protection Masterfile
DOD	U.S. Department of Defense
DOE	U.S. Department of Energy
EDR	Environmental Data Registry
EPA	Environmental Protection Agency
FRTR	Federal Remediation Technologies Roundtable
GEDI	Site Remediation Integrated Data System
HAZSITE	Hazardous Site Database Submittal System
IMC	Information Management Center
LUST	Leaking Underground Storage Tank
MODNR	Missouri Department of Natural Resources
NAICS	North American Industry Classification System
NJDEP	New Jersey Department of Environmental Protection
OERR	Office of Emergency and Remedial Response
PAH	Polynuclear aromatic hydrocarbons
PCB	Polychlorinated biphenyls
PSTS	Petroleum Storage Tanks System
RCRA	Resource Conservation and Recovery Act
REACH IT	Remediation and Innovation Characterization Technologies
SDC	Systems Development Center
SISDATA	Federal and State Superfund Site Data database
SMARS	Site Management and Resource System
SRP	Site Remediation Program
TNRCC	Texas Natural Resources Conservation Commission
USEPA	United States Environmental Protection Agency
VCP	Voluntary Cleanup Program
VOLCLEAN	Voluntary Cleanup Program database